ADVANTECH

ASR-3100 1U Dual Xeon E5-2600 v3 NVMe Storage Server ASR-3100 1U Dual Xeon E5-2600 v3 NVMe存储服务器 ASR-3100 1U Dual Xeon E5-2600 v3 NVMe存储伺服器 Startup Manual/快速入门手册/快速入门手册

Packing List/包装清单/包裝清單

Before you begin installing your card, please make sure that the following items have been shipped:

- 1. 1 x ASR-3100 System Unit
- 2. 1 x Startup Manual
- 3. 2 x Chassis mounting ear with handle
- 4. 2 x CPU heatsink
- 5. 1 x Driver CD
- 6. 1 x Slide rail kit
- 7. 1 x CMA
- Screws for fastening the mounting ears, and Warranty card

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

打开包装后请确认包装中含有下面所列各项:

- 1. 1台ASR-3100系统设备
- 2. 1本快速入门手册
- 3. 2个机架用锁附耳柄(含把手)
- 4. 2块处理器散热片
- 5. 1个驱动光盘
- 6. 1个机架用滑轨

- 7. 线材理线器
- 8. 螺丝,用于固定耳柄及保固卡

如果其中任何一项缺失或损坏,请立即与经销商或销售代 表联系。

打開包裝後請確認包裝中含有下面所列各項:

- 1. 1台ASR-3100系統設備
- 2. 1本快速入門手冊
- 3. 2個機架用鎖附耳柄(含把手)
- 4. 2塊處理器散熱片
- 5. 1個驅動光碟
- 6. 1個機架用滑軌
- 7. 線材理線器
- 8. 螺絲,用於固定耳柄及保固卡

如果其中任何一項缺失或損壞,請立即與經銷商或銷售代 表聯繫。

For more information on this and other Advantech products, please visit our website at: 如需了解有关本产品及研华其它产品的详细信息,请访问我们的网站:

如需瞭解有關本產品及研華其他產品的詳細資訊,請瀏覽我們的網站:

http://www.advantech.com

http://www.advantech.com/eplatform

For technical support and service, please visit our support website at:

如需技术服务与支持,请访问我们的技术支持网站: 如需技術服務與支援,請瀏覽我們的技術支援網站:

http://support.advantech.com

This manual is for the ASR-3100 Series.

本手冊適用於ASR-3100系列。

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Part No. /料号/料號: 2001310010 Print in China/中国印刷/中國印刷 1st Edition/第一版 January 2016/2016年1月

Specifications/产品规格/產品規格

| Processor System 处理器系统 處理器系統 | CPU | Intel® Xeon E5-2600 v3 Series Processor Intel® Xeon E5-2600 v3系列处理器 Intel® Xeon E5-2600 v3系列處理器 |
|--|---|---|
| Chipset 芯片组 晶片組 | Intel® C612 | |
| Memory 内存 記憶體 | DIMM | DDR4 2133MHz 288pin RDIMM up to 32 GB per DIMM, Total 16 DIMMs DDR4 2133MHz 288针RDIMM,每路DIMM最高可达32 GB,总共16路 DIMM DDR4 2133MHz 288針RDIMM,每路DIMM最高可達32 GB,總共16路 DIMM |
| Expansion 扩展 擴充性 | PCle x8 FHHL | 1 |
| | PCle x8 HHHL | 1 |
| Ethernet 以太网 乙太網路 | Interface 接口 | 10/100/1000 Mbps RJ45 x2 |
| | Controller 控制器 | LAN1/2: Intel I210AT |
| Display 显示 顯示 | Controller 控制器 | AST 2400 |
| | VRAM | 64 MB video memory 64 MB显示专用内存 64 MB顯示專用記憶體 |
| I/O Interface I/0接口 I/0介面 | Front I/O Ports 前部I/0接口 | USB 2.0 x 1 |
| | Rear I/O Ports 后部I/0接口 | VGA x 1, COM x1, USB 3.0 x 4, GbE LAN x 2 |
| Storage 存储 存储 | 2.5" HDD | Supports up to 16 hot-swap 2.5" NVMe/SAS 12G/SATA 6G Drives 最高支持16个热插入2.5" NVMe/SAS 12G/SATA 6G磁盘 最高支持16個熱插拔2.5" NVMe/SAS 12G/SATA 6G磁盤 |
| Power Supply 电源 電源 | 1U 1+1 1100W Redundant Power Supply 1U 1+1 1100W冗余电源 1U 1+1 1100W冗餘電源 | |
| Input Rating 额定输入电压/电流 額定輸入電壓/電流 | 100-120 Vac~, 50/60 Hz, 12A 200-240 Vac~, 50/60 Hz, 7 A | |
| Environmental 环境 環境 | Operating Temperature 工作温度 工作温度 | 0 ~ 40° C (32 ~104° F) |
| | Operating Humidity 工作湿度 工作濕度 | 10~85% @ 40° C non-condensing 非凝結 |
| Physical Characteristic 物理特性 | Dimensions (W x H x D) 产品尺寸 (W x H x D) 產品尺寸 (W x H x D) | 806 x 430 x 44 mm |
| | Weight 重量 | 19 kg |

System Setup/系统安装/系統安裝

NOTE: Before inserting or removing the HDD from HDD bay, please turn off the system

- ** 请在插入或是移除硬盘时,请先将主机电源关闭。
- ** 請在插入或是移除硬碟時,請先將主機電源關閉。
- Removing the Chassis Cover. 移除机箱顶盖。 拆除機箱上蓋。



Installing the CPU. 安装CPU。 安裝CPU。

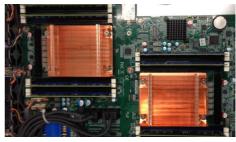




Installing the memory. 安装内存。 安裝記憶體。



4. Installing the CPU Cooler. 安装 CPU 散热器。 安裝 CPU 散熱器。

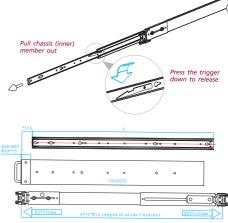


Attaching the ears and handles. 安裝耳柄和把手。 安裝耳翼和把手。



Slide Rail Installation

1. Remove the chassis (inner) member. Pull the slide open, then press the trigger down as shown on the drawing, and pull the chassis (inner) member out.



**Extendable front bracket only apply to some Tool-less model

System Setup/系统安装/系統安裝

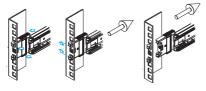
 Mount the chassis (inner) member to the chassis. You may opt for the M4 or M5 pan head screw. The screw head of either M4 or M5 can not exceed 2.0 mm. Alternatively, you may mount the slide member to the chassis through standoffs. Likewise, the head of standoff can not exceed 2.0 mm. Each side of chassis needs to use 3 screws or standoffs for slide attachment.



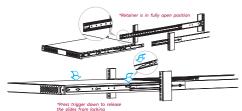
Attach the cabinet (outer) member to the rail.
 Insert the stag into the upper and lower square holes on EIA rail from the back of rail. Push the safety lock forward to secure the bracket. It is important to check if the safety lock is in the unlocked position before mounting the brackets.



Uninstall the bracket

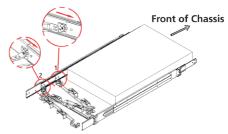


4. Mount the chassis into the cabinet. Insert the chassis (inner) member into the cabinet member as shown on the drawing. It is important to check if the ball retainer is in fully open position before installing the chassis, otherwise it might cause catastrophic damage to the chassis if the ball retainer is not in the fully open position while mounting the chassis. While you are pushing the chassis back to the cabinet, you need to release the slide from its locking position by pressing the trigger down.

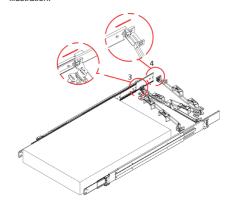


Cable Management Arm (CMA) Installation

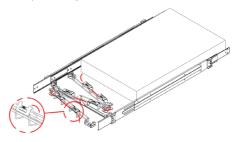
 Attach the inner member connector to the rear of the right hand inner slide member, and supporting bar connector to the rear of the right hand middle slide member as shown on the illustration.



Attach the supporting bar connector to the rear of left middle member, and the outer member connector to the rear of the left outer member as shown on the illustration



 Open the red cap as shown, and routing the cable and cords through the wire carrier. Very important!! Use Velcro strap to fasten the cables and cords. You may find slot on connectors and aluminum joints. Use 2 straps on each joint and 1 on each connector.



Move the chassis back and forth to see if cable arm motion is smooth. If not, loosen the strap a little bit for better motion.

Safety Instructions/安全指示

- 1. Read these safety instructions carefully.
- 2. Keep this User Manual for later reference.
- 3. Disconnect this equipment from any AC outlet before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
- 4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible
- 5. Keep this equipment away from humidity.
- 6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
- The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.
- 8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- 9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- 10. All cautions and warnings on the equipment should be noted.
- 11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient overvoltage.
- 12. Never pour any liquid into an opening. This may cause fire or electrical shock.
- 13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service
- 14. If one of the following situations arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment does not work well, or you cannot get it to work according to the user's manual.
 - The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.
- 15. Do not leave this equipment in an environment where the storage temperature may go below 0° C (32° F) or above 40° C (104° F). This could damage the equipment. The equipment should be in a controlled
- 16. CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER, DISCARD USED BAT-TERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.
- 17. THE COMPUTER IS PROVIDED WITH CD DRIVES COMPLY WITH APPROPRIATE SAFETY STANDARDS INCLUDING IEC 60825.

CLASS 1 LASER PRODUCT KLASSE 1 LASER PRODUKT

18. This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference.

- 1. 请仔细阅读此安全操作说明。
- 2. 请妥善保存此用户手册供日后参考。
- 3. 用湿抹布清洗设备前,请从插座拔下电源线。请不要使 用液体或去污喷雾剂清洗设备。
- 4. 对于使用电源线的设备,设备周围必须有容易接触到的 电源插座。
- 5. 请不要在潮湿环境中使用设备。
- 6. 请在安装前确保设备放置在可靠的平面上,意外跌落可 能会导致设备损坏。
- 7. 设备外壳的开口是用于空气对流,从而防止设备过热。 请不要覆盖这些开口。
- 8. 当您连接设备到电源插座上前,请确认电源插座的电压 是否符合要求。
- 9. 请将电源线布置在人们不易绊到的位置,并不要在电源 在线覆盖任何杂物。
- 10. 请注意设备上的所有警告和注意标语。
- 11. 如果长时间不使用设备,请将其同电源插座断开,避免 设备被超标的电压波动损坏。
- 12. 请不要让任何液体流入通风口,以免引起火灾或者短 路。
- 13. 请不要自行打开设备。为了确保您的安全,请由经过认 证的工程师来打开设备。
- 14. 如遇下列情况,请由专业人员来维修:
 - 电源线或者插头损坏;
 - 设备内部有液体流入;
 - 设备曾暴露在过于潮湿的环境中使用;
 - 设备无法正常工作,或您无法通过用户手册来使其 正常工作;
 - 设备跌落或者损坏:
 - 设备有明显的外观破损。
- 15. 请不要把设备放置在超出我们建议的温度范围的环境, 即不要低于0°C(32°F)或高于40°C(104°F),否 则可能会损坏设备。
- 16. 注意: 计算机配置了由电池供电的实时时钟电路, 如果 电池放置不正确,将有爆炸的危险。因此,只可以使用 制造商推荐的同一种或者同等型号的电池进行替换。请 按照制造商的指示处理旧电池。
- 17. 计算机的光盘驱动器符合相应的安全标准,如IEC 60825 等。
- 18. 本品符合FCC规则第15款限制。操作符合下列两种情况: (1) 此装置不可产生干扰;
 - (2) 此装置必须接受任何干扰,包括可能导致非预期造成 的干扰。

System Setup/系统安装/系統安裝

- 1. 請仔細閱讀此安全操作說明。
- 2. 請妥善保存此用戶手冊供日後參考。
- 3. 用濕抹布清洗設備前,請從插座拔下電源線。請不要使 用液體或去汙噴霧劑清洗設備。
- 對於使用電源線的設備,設備周圍必須有容易接觸到的電源插座。
- 5. 請不要在潮濕環境中使用設備。
- 6. 請在安裝前確保設備放置在可靠的平面上,意外跌落可 能會導致設備損壞。
- 7. 設備外殼的開口是用於空氣對流,從而防止設備過熱。 請不要覆蓋這些開口。
- 當您連接設備到電源插座上前,請確認電源插座的電壓 是否符合要求。
- 請將電源線佈置在人們不易絆到的位置,並不要在電源 線上覆蓋任何雜物。
- 10. 請注意設備上的所有警告和注意標語。
- 11. 如果長時間不使用設備,請將其同電源插座斷開,避免 設備被超標的電壓波動損壞。
- 12. 請不要讓任何液體流入通風口,以免引起火災或者短路。
- 13. 請不要自行打開設備。為了確保您的安全,請由經過認 證的工程師來打開設備。
- 14. 如遇下列情況,請由專業人員來維修:
 - 電源線或者插頭損壞:
 - 設備內部有液體流入;
 - 設備曾暴露在過於潮濕的環境中使用:
 - 設備無法正常工作,或您無法通過用戶手冊來使其 正常工作;
 - 設備跌落或者損壞;
 - 設備有明顯的外觀破損。
- 15. 請不要把設備放置在超出我們建議的溫度範圍的環境, 即不要低於0°C(32°F)或高於40°C(104°F), 否 則可能會損壞設備。
- 16. 注意:電腦配置了由電池供電的即時時鐘電路,如果電池放置不正確,將有爆炸的危險。因此,只可以使用製造商推薦的同一種或者同等型號的電池進行替換。請按照製造商的指示處理舊電池。
- 17. 計算機的光碟應符合相應的安全標準,如IEC 60825等。
- 18. 本品符合FCC規範第15款限制。操作符合下列兩種情況: (1)此裝置不可產生干擾;
 - (2) 此装置必須接受任何干擾,包括可能導致非預期 造成的干擾。

Safety Precautions-Electricity/ 安全措施-静电防护/安全措施-靜電防護

Follow these simple precautions to protect yourself from harm and the products from damage.

- To avoid electrical shock, always disconnect the power from your PC chassis before you work on it.
- For the sake of the equipment, disconnect power before making any configuration changes. The sudden rush of power as you connect a jumper or install a card may damage sensitive electronic components.
- 3. Electronic components are also vulnerable to damage by electrostatic discharge. An electrostatic charge can build up on the human body, especially where the air is dry. At minimum, dissipate potential body charge before handling any electronic board by touching a conductive surface on the chassis. Only then remove circuit boards from their antistatic bags. Handle boards by the edges or mounting brackets only; do not touch components or connecting pins.

为了保护您和您的设备免受伤害或损坏,请遵照以下安全措施:

- 1. 操作设备之前,请务必断开机箱电源,以防触电。
- 在更改任何配置之前请断开电源,以免在您连接跳线或 安装卡时,瞬间电涌损坏敏感电子元件。
- 3. 无论何时进行操作,请务必完全断开机箱电源。不可在 电源接通时进行设备连接,以避免瞬间电涌损坏敏感电 子元件。只有专业技术人员才可以打开机箱。接触产品 的母板、底板或附加卡前,请先确保您接地来移除身体 附带的静电。由于现在的电子设备对静电十分敏感,为 了安全起见,请使用接地腕环。请将所有电子元件放在 无静电的表面或静电屏蔽袋中。

為了保護您和您的設備免受傷害或損壞,請遵照以下安全措施:

- 1. 操作設備之前,請務必切斷機箱電源,以防觸電。
- 在更改任何配置之前請切斷電源,以免在您連接跳線或 安裝卡時,瞬間電湧損壞敏感電子元件。
- 3. 無論何時進行操作,請務必完全切斷機箱電源。不可在電源接通時進行設備連接,以避免瞬間電湧損壞敏感電子元件。只有專業技術人員才可以打開機箱、接觸產品的母板、底板或外接卡前,請先確保您接地來移除身體附帶的靜電。由於現在的電子設備對靜電十分敏感,為了安全起見,請使用接地腕環。請將所有電子元件放在無靜電的表面或靜電屏蔽袋中。